

Please provide the following new Abstract of the Disclosure:

A sintered ceramic composite superconducting electric lead has a physical-chemical phase composition including three nano-phases formed by first phase elements constituted by nano-size superconducting ceramic crystal grains which are substantially uniformly and tightly aligned in a-b crystallographic planes along a major direction of an electric current flux of the superconducting electric lead, second phase elements constituted by nano-size multi-oxide silicate glass films, and third phase elements constituted by nano-dopes and other nano-size impurity particles including non-superconductor ceramic crystals and grains, and the first, second and third phase elements together form a superconducting nano structure comprising a honeycomb-like three dimensional setting network which consists of the second and third phase elements located in boundary areas of the first phase elements and caging and surrounding the first phase elements which are the nano-size superconducting ceramic crystal grains.